



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 167744

TO: Ralph J Gitomer
Location: 3d65 / 3c18
Art Unit: 1655
Friday, October 21, 2005

Case Serial Number: 10/783749

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
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Noble.jarrell@uspto.gov

Search Notes

=> d his full

(FILE 'HOME' ENTERED AT 08:42:26 ON 21 OCT 2005)

FILE 'HCAPLUS' ENTERED AT 08:42:44 ON 21 OCT 2005

L1 1 SEA ABB=ON PLU=ON (US2004161365 OR US6723500 OR US2003104510)
/PN OR (US2004-783749# OR US2001-011000#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 08:44:03 ON 21 OCT 2005

FILE 'HCAPLUS' ENTERED AT 08:44:03 ON 21 OCT 2005

L2 TRA L1 1- RN : 2 TERMS

FILE 'REGISTRY' ENTERED AT 08:44:04 ON 21 OCT 2005

L3 2 SEA ABB=ON PLU=ON L2

FILE 'WPIX' ENTERED AT 08:44:07 ON 21 OCT 2005

L4 2 SEA ABB=ON PLU=ON (US2004161365 OR US6723500 OR US2003104510)
/PN OR (US2004-783749# OR US2001-011000#)/AP,PRN

=> b hcap;d all 11 tot

FILE 'HCAPLUS' ENTERED AT 08:44:44 ON 21 OCT 2005

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FILE COVERS 1907 - 21 Oct 2005 VOL 143 ISS 18

FILE LAST UPDATED: 20 Oct 2005 (20051020/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:435210 HCAPLUS

DN 138:398367

ED Entered STN: 06 Jun 2003

TI Test strips having a plurality of reaction zones and methods for using and manufacturing the same

IN Yu, Yeung Siu

PA Lifescan, Inc., USA

SO U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM C12Q001-26

INCL 435025000

CC 9-1 (Biochemical Methods)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2003104510	A1	20030605	US 2001-11000	20011205 <--

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US 6723500          B2      20040420
NO 2002005804       A       20030606      NO 2002-5804      20021203 <--
CA 2413533          AA      20030605      CA 2002-2413533  20021204 <--
EP 1318397          A1      20030611      EP 2002-258366  20021204 <--
    R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
JP 2003247996       A2      20030905      JP 2002-352801  20021204 <--
CN 1458526          A       20031126      CN 2002-151582  20021204 <--
US 2004161365       A1      20040819      US 2004-783749  20040219 <--
PRAI US 2001-11000   A       20011205  <--

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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003104510	ICM	C12Q001-26
	INCL	435025000
US 2003104510	NCL	435/025.000
	ECLA	G01N033/52C; G01N033/558
EP 1318397	ECLA	G01N033/52C; G01N033/558
US 2004161365	NCL	422/056.000
	ECLA	G01N033/52C; G01N033/558

AB Test strips, and methods for their manufacture and use in the determination of the concentration of at least one analyte in a physiol. sample are provided. The subject test strips have a plurality of reaction zones defined by a hydrophobic barrier. The reagent compns. present in each reaction zone may be the same or different. In addition, each reaction zone may have a sep. fluid channel, or two or more of the reaction zones may have sep. channels that merge into a single channel. In use, sample is applied to a subject test strip, a signal is detected and then related to the amount of analyte in the sample. Also provided are methods for manufacturing the subject test strips using thermal transfer technol. to apply the hydrophobic barrier. Finally, kits are provided for use in practicing the subject methods.

ST test strip plurality reaction zone manufg

IT Enzymes, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Glucose oxidizing; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Inks

(Hydrophobic; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Analytical apparatus

(Test strips; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Apparatus

(Thermal head; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Blood analysis

(glucose; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Enzymes, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(oxidizing; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Absorption

Biological materials

Blood analysis

Communication

Composition

Concentration (condition)

Dyes

Fluids

Lances

Measuring apparatus

Oxidation

Reaction

Standard substances, analytical

Test kits
Volume
 (test strips having a plurality of reaction zones and methods for using
 and manufacturing the same)
IT Enzymes, uses
Reagents
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (test strips having a plurality of reaction zones and methods for using
 and manufacturing the same)
IT 50-99-7, Glucose, analysis
 RL: ANT (Analyte); ANST (Analytical study)
 (test strips having a plurality of reaction zones and methods for using
 and manufacturing the same)
IT 7722-84-1, Hydrogen peroxide, uses
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (test strips having a plurality of reaction zones and methods for using
 and manufacturing the same)

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; DE 40677 1964
- (2) Anon; WO 0058730 2000 HCAPLUS
- (3) Azarnia; US 5607565 A 1997 HCAPLUS
- (4) Carpenter; US 20020138222 A1 2002
- (5) Cass; US 20020168692 A1 2002
- (6) Catt; US 6451619 B1 2002 HCAPLUS
- (7) Charlton; US 5208163 A 1993 HCAPLUS
- (8) Christian; US 4673657 A 1987 HCAPLUS
- (9) Deeg; US 5338688 A 1994
- (10) Douglas; US 5843691 A 1998 HCAPLUS
- (11) Fonner; US 3001915 A 1961 HCAPLUS
- (12) Freitag; US 6410341 B1 2002 HCAPLUS
- (13) Friesen; US 4861711 A 1989 HCAPLUS
- (14) Fujisaki; US 5935520 A 1999 HCAPLUS
- (15) Gordon; US 4960691 A 1990 HCAPLUS
- (16) Han; US 6121050 A 2000 HCAPLUS
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- (18) Hayes; US 4877745 A 1989 HCAPLUS
- (19) Huang; US 6368876 B1 2002 HCAPLUS
- (20) Inoue; US 5476330 A 1995
- (21) Kiser; US 5719034 A 1998 HCAPLUS
- (22) Knappe; US 6455001 B1 2002 HCAPLUS
- (23) Kronish; US 3785929 A 1974
- (24) Lea; US 6403384 B1 2002 HCAPLUS
- (25) Macho; US 5451350 A 1995
- (26) Malick; US 6194220 B1 2001 HCAPLUS
- (27) May; US 6228660 B1 2001 HCAPLUS
- (28) McAleer; US 5951836 A 1999 HCAPLUS
- (29) McAleer; US 6241862 B1 2001 HCAPLUS
- (30) Meyer; US 3127281 A 1964
- (31) Moorman; US 5356782 A 1994 HCAPLUS
- (32) Owada; US 5820284 A 1998
- (33) Phillips; US 5563042 A 1996 HCAPLUS
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- (35) Rice; US D381591 S 1997
- (36) Sheinman; US 6003980 A 1999
- (37) Shurben; US 4960565 A 1990 HCAPLUS
- (38) Swanson; US 5073484 A 1991 HCAPLUS
- (39) Wang; US 4618475 A 1986 HCAPLUS
- (40) Wang; US 4622207 A 1986
- (41) Wang; US 4687529 A 1987
- (42) Whiteman; US 5830170 A 1998
- (43) Wie; US 5240844 A 1993
- (44) Yum; US 6251083 B1 2001

=> b reg;d ide 13 tot

FILE 'REGISTRY' ENTERED AT 08:44:51 ON 21 OCT 2005
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STRUCTURE FILE UPDATES: 19 OCT 2005 HIGHEST RN 865652-03-5
DICTIONARY FILE UPDATES: 19 OCT 2005 HIGHEST RN 865652-03-5

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
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predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN 7722-84-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hydrogen peroxide (8CI)
OTHER NAMES:
CN Adeka Super EL
CN Albone
CN Albone 35
CN Albone DS
CN Anti-Keim 50
CN Asepticper
CN Baquashock
CN CIX
CN Crestal Whitestrips
CN Crystacide
CN Dentasept
CN Deslime LP
CN Hioxyl
CN Hipox
CN Hybrite
CN Hydrogen dioxide
CN Inhibine
CN Lensan A
CN Metrokur
CN Mirasept

CN NSC 19892
CN Odosat D
CN Opalescence Xtra
CN Oxigenal
CN Oxydol
CN Oxyfull
CN Oxysept
CN Oxysept I
CN Pegasyl
CN Perhydrol
CN Perone
CN Peroxaan
CN Peroxclean
CN Quasar Brite
CN Select Bleach
CN Superoxol
CN T-Stuff
CN Xtra White
FS 3D CONCORD
DR 8007-30-5, 66554-50-5, 37355-84-3, 218625-72-0
MF H2 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DDFU,
DETERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*,
SCISEARCH, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

HO-OH

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

89704 REFERENCES IN FILE CA (1907 TO DATE)
782 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
89897 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN

RN 50-99-7 REGISTRY

ED Entered STN: 16 Nov 1984

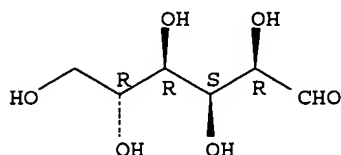
CN D-Glucose (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN (+)-Glucose
CN Anhydrous dextrose
CN Cartose
CN Cerelose
CN Cerelose 2001
CN Clearsweet 95
CN Clintose L
CN Corn sugar
CN CPC hydrate
CN D(+)-Glucose
CN Dextropur
CN Dextrose
CN Dextrosol
CN Glucodin
CN Glucolin
CN Glucose

CN Glucosteril
 CN Goldsugar
 CN Grape sugar
 CN Maxim Energy Gel
 CN Meritose
 CN Meritose 200
 CN Roferose ST
 CN Staleydex 111
 CN Staleydex 130
 CN Staleydex 333
 CN Staleydex 95M
 CN Sugar, grape
 CN Tabfine 097(HS)
 CN Vadex
 FS STEREOSEARCH
 DR 8012-24-6, 8030-23-7, 162222-91-5, 165659-51-8, 50933-92-1, 80206-31-1
 MF C6 H12 O6
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
 BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,
 CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
 DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB,
 IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT,
 NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, TOXCENTER, TULSA,
 ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

181456 REFERENCES IN FILE CA (1907 TO DATE)
 2543 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 181771 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> b wpix;d all 14 tot

FILE 'WPIX' ENTERED AT 08:44:57 ON 21 OCT 2005
 COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED: 19 OCT 2005 <20051019/UP>
 MOST RECENT DERWENT UPDATE: 200567 <200567/DW>
 DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
 PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://thomsonderwent.com/coverage/latestupdates/> <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
 GUIDES, PLEASE VISIT:
<http://thomsonderwent.com/support/userguides/> <<<

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DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
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>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
PLEASE CHECK:
<http://thomsonderwent.com/support/dwpieref/reftools/classification/code-revision/>
FOR DETAILS. <<<
'BIX BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

L4 ANSWER 1 OF 2 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2004-614823 [59] WPIX
DNC C2004-221447
TI Test strip for determining analyte concentration in physiological sample
e.g. glucose in blood comprises hydrophobic barrier separating reaction
zones.
DC B04 D16 J04
IN SIU YU, Y
PA (YUYI-I) SIU YU Y
CYC 1
PI US 2004161365 A1 20040819 (200459)* 16 C12Q001-66 <--
ADT US 2004161365 A1 Div ex US 2001-11000 20011205, US
2004-783749 20040219
FDT US 2004161365 A1 Div ex US 6723500
PRAI US 2001-11000 20011205; US 2004-783749
20040219
IC ICM C12Q001-66
AB US2004161365 A UPAB: 20040915
NOVELTY - A test strip comprising reaction zones (20 - 22) defined by a
barrier comprising hydrophobic ink and a reagent composition comprising at
least one member of an analyte oxidation based signal producing system
present in each reaction zone, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) manufacturing the reaction zones of the strip; and
(2) a kit comprising the test strip(s) and instructions for using the
strip.
USE - The test strip is useful for determining concentration of at
least one analyte in a physiological sample e.g. glucose concentration
(claimed) in blood.
ADVANTAGE - Contamination of reaction zones is minimized or
eliminated. The test strip is easy to use and manufactured easily at low
cost. The results are accurate, precise and reproducible.
DESCRIPTION OF DRAWING(S) - The figure shows perspective view of the
test strip.
Reaction zones 20 - 22
Bottom layer 30
Intermediate layer 500
Dwg.3/5
FS CPI
FA AB; GI; DCN
MC CPI: B04-B04D5; B10-A07; B11-C08; B11-C09; B12-K04A; D05-H09; J04-B01B;
J04-C04

L4 ANSWER 2 OF 2 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2003-801235 [75] WPIX
DNC C2003-221203
TI Test strip for determining the concentration of analyte(s) in
physiological sample, has reaction zones each defined by hydrophobic
barrier, and reagent composition.
DC B04 D16
IN YU, Y S; YU, S
PA (LIFE-N) LIFESCAN INC; (YUYS-I) YU Y S

CYC 39

PI US 2003104510 A1 20030605 (200375)* 16 C12Q001-26 <--

CA 2413533 A1 20030605 (200375) EN G01N033-52

EP 1318397 A1 20030611 (200375) EN G01N031-22

R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC

MK NL PT RO SE SI SK TR

JP 2003247996 A 20030905 (200375) 15 G01N033-543

KR 2003046315 A 20030612 (200375) G01N033-49

NO 2002005804 A 20030606 (200375) G01N033-52

CN 1458526 A 20031126 (200413) G01N033-52

US 6723500 B2 20040420 (200427) C12Q001-00 <--

AU 2002302090 A1 20030619 (200461) G01N033-531

MX 2002011970 A1 20040701 (200545) C12M001-34

TW 2003005015 A 20031016 (200557) G01N033-48

ADT US 2003104510 A1 US 2001-11000 20011205; CA 2413533 A1 CA

2002-2413533 20021204; EP 1318397 A1 EP 2002-258366 20021204; JP

2003247996 A JP 2002-352801 20021204; KR 2003046315 A KR 2002-76491

20021204; NO 2002005804 A NO 2002-5804 20021203; CN 1458526 A CN

2002-151582 20021204; US 6723500 B2 US 2001-11000 20011205; AU

2002302090 A1 AU 2002-302090 20021126; MX 2002011970 A1 MX 2002-11970

20021203; TW 2003005015 A TW 2002-135112 20021204

PRAI US 2001-11000 20011205

IC ICM C12M001-34; C12Q001-00; C12Q001-26; G01N031-22; G01N033-48;

G01N033-49; G01N033-52; G01N033-531; G01N033-543

ICS C12M003-00; C12Q001-54; G01N033-53; G01N033-66

AB US2003104510 A UPAB: 20031120

NOVELTY - A test strip for determining the concentration of analyte(s) in a physiological sample, comprising reaction zones (20-24); and a reagent composition present in each reaction zone, is new. Each reaction zone is defined by a hydrophobic barrier.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(1) manufacturing the reaction zones of the test strip, comprising positioning a thermal head in alignment with a test strip matrix, and actuating the thermal head in a manner to transfer a volume of hydrophobic composition onto the matrix; and

(2) a kit for determining the concentration of analyte(s) in the physiological sample, comprising the novel test strip(s), and instructions for using the test strip.

The hydrophobic composition is deposited on the matrix to produce the test strip comprising the reaction zones. Each zone is defined by the hydrophobic composition.

USE - For determining the concentration of analyte(s) in a physiological sample, by applying the sample to the test strip, detecting a signal produced by the reaction of the reagent composition with the sample, and relating the detected signal to the amount of the analyte in the sample (claimed).

ADVANTAGE - The invention is simple to use, accurate, precise and easy, and low cost to manufacture.

DESCRIPTION OF DRAWING(S) - The drawing shows an exemplary test strip matrix.

Reaction zones 20-24.

Dwg.1/5

FS CPI

FA AB; GI; DCN

MC CPI: B04-L01; B05-C08; B10-A07; B11-C08E3; B12-K04A; D05-H09

=> b home

FILE 'HOME' ENTERED AT 08:45:04 ON 21 OCT 2005

=>

=> d his full

(FILE 'HOME' ENTERED AT 08:42:26 ON 21 OCT 2005)

FILE 'HCAPLUS' ENTERED AT 08:42:44 ON 21 OCT 2005

L1 1 SEA ABB=ON PLU=ON (US2004161365 OR US6723500 OR US2003104510)
/PN OR (US2004-783749# OR US2001-011000#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 08:44:03 ON 21 OCT 2005

FILE 'HCAPLUS' ENTERED AT 08:44:03 ON 21 OCT 2005

L2 TRA L1 1- RN : 2 TERMS

FILE 'REGISTRY' ENTERED AT 08:44:04 ON 21 OCT 2005

L3 2 SEA ABB=ON PLU=ON L2

FILE 'WPIX' ENTERED AT 08:44:07 ON 21 OCT 2005

L4 2 SEA ABB=ON PLU=ON (US2004161365 OR US6723500 OR US2003104510)
/PN OR (US2004-783749# OR US2001-011000#)/AP,PRN

L5 106880 SEA ABB=ON PLU=ON (G01N033-48# OR G01N033-49# OR G01N033-50#
OR G01N033-52# OR G01N033-53# OR C12Q001)/IPC

L6 157401 SEA ABB=ON PLU=ON (B11-C08E6 OR C11-C08E6 OR B11-C10? OR
C11-C10? OR S03-E14H? OR D05-H09 OR D05-H04 OR D05-H05 OR
D05-H06?)/MC

L7 214940 SEA ABB=ON PLU=ON (P831 OR N100 OR N102 OR N105 OR R510 OR
R511 OR R515)/M0,M1,M2,M3,M4,M5,M6 OR (B12-K04 OR C12-K04 OR
B12-K04E OR C12-K04E OR B12-K04A OR C12-K04A)/MC

L8 100837 SEA ABB=ON PLU=ON (L5 OR L6 OR L7) AND R63#/M0,M1,M2,M3,M4,M5
,M6
E SIU YU L/AU
E SIU YU Y/AU

L9 3 SEA ABB=ON PLU=ON "SIU YU Y"/AU
E LIFESCAN/CS,PA

L10 206 SEA ABB=ON PLU=ON (LIFESCAN/CS OR LIFESCAN/PA OR "LIFESCAN
CO"/CS OR "LIFESCAN CO"/PA OR "LIFESCAN CO LTD"/CS OR "LIFESCAN
CO LTD"/PA OR "LIFESCAN CORP"/CS OR "LIFESCAN CORP"/PA OR
"LIFESCAN INC"/CS OR "LIFESCAN INC"/PA OR "LIFESCAN LLC"/CS OR
"LIFESCAN LLC"/PA OR "LIFESCAN LTD"/CS OR "LIFESCAN LTD"/PA OR
"LIFESCAN SCOTLAND LTD"/CS OR "LIFESCAN SCOTLAND LTD"/PA)

L11 122 SEA ABB=ON PLU=ON L8 AND (L9 OR L10)

L12 3 SEA ABB=ON PLU=ON L8 AND L9

L13 100834 SEA ABB=ON PLU=ON L8 NOT L12

L14 1914 SEA ABB=ON PLU=ON L13 AND ?HYDROPHOB?/BIX,BI,ABEX

L15 1417 SEA ABB=ON PLU=ON L14 AND (M781 OR M782)/M0,M1,M2,M3,M4,M5,M6

L16 490 SEA ABB=ON PLU=ON L15 NOT (PY>2001 OR AY>2001 OR PRY>2001)

L17 47029 SEA ABB=ON PLU=ON L8 AND (R61# AND R62#)/M0,M1,M2,M3,M4,M5,M6

L18 20993 SEA ABB=ON PLU=ON L17 NOT (PY>2001 OR AY>2001 OR PRY>2001)

L19 16989 SEA ABB=ON PLU=ON L18 AND L6

L20 5 SEA ABB=ON PLU=ON L18 AND ?HYDROPHOB?/BIX,BI,ABEX (L)BARRIER?
/BIX,BI,ABEX

L21 14 SEA ABB=ON PLU=ON L18 AND (L9 OR L10)

L22 5 SEA ABB=ON PLU=ON L20 NOT L21

L23 1 SEA ABB=ON PLU=ON 1993-182693/AN AND L22

L24 4 SEA ABB=ON PLU=ON L18 AND L5 AND ?HYDROPHOB?/BIX,BI,ABEX
(L)BARRIER?/BIX,BI,ABEX

L25 5 SEA ABB=ON PLU=ON L18 AND L7 AND ?HYDROPHOB?/BIX,BI,ABEX
(L)BARRIER?/BIX,BI,ABEX

L26 0 SEA ABB=ON PLU=ON L25 NOT (L22 OR L24)

L27 128 SEA ABB=ON PLU=ON (L5 OR L6 OR L7) AND ?HYDROPHOB?/BIX,BI,ABE
X (L)BARRIER?/BIX,BI,ABEX

L28 63 SEA ABB=ON PLU=ON L27 AND R63#/M0,M1,M2,M3,M4,M5,M6

L29 11 SEA ABB=ON PLU=ON L28 NOT (PY>2001 OR AY>2001 OR PRY>2001)

L30 6 SEA ABB=ON PLU=ON L29 NOT (L25 OR L22 OR L24)

L31 3 SEA ABB=ON PLU=ON (1988-106828/AN OR 1993-171852/AN OR
1994-265967/AN) AND L30

L32 7 SEA ABB=ON PLU=ON L11 AND ?HYDROPHOB?/BIX,BI,ABEX
 L33 9 SEA ABB=ON PLU=ON (L12 OR L32)
 L34 4 SEA ABB=ON PLU=ON (L23 OR L31)

 FILE 'HCAPLUS' ENTERED AT 10:00:08 ON 21 OCT 2005
 L35 39424 SEA ABB=ON PLU=ON (BIOCHEM?(L)METHOD?)/SC,SX AND ?REAGENT?
 E REAGENTS/CT
 E E3+ALL
 L36 QUE ABB=ON PLU=ON REAGENTS+NT/CT
 L37 4019 SEA ABB=ON PLU=ON (BIOCHEM?(L)METHOD?)/SC,SX AND L36
 L38 13035 SEA ABB=ON PLU=ON ANALYTICAL APPARATUS+OLD,NT/CT
 L39 1307 SEA ABB=ON PLU=ON (L35 OR L37) AND L38
 L40 55 SEA ABB=ON PLU=ON L39 AND ?HYDROPHOB?
 L41 123 SEA ABB=ON PLU=ON (LIFESCAN OR LIFE(W)SCAN)/CS,PA
 E SIU YU Y/AU
 D BIB L1
 E YU Y/AU
 L42 371 SEA ABB=ON PLU=ON ("YU Y"/AU OR "YU Y S"/AU OR "YU Y S
 L"/AU)
 E YU YEUNG/AU
 L43 30 SEA ABB=ON PLU=ON ("YU YEUNG"/AU OR "YU YEUNG S"/AU OR "YU
 YEUNG SIU"/AU)
 L44 4 SEA ABB=ON PLU=ON L40 AND (L41 OR L42 OR L43)
 L45 51 SEA ABB=ON PLU=ON L40 NOT L44
 L46 39 SEA ABB=ON PLU=ON L45 AND (PY<=2001 OR AY=2001 OR PRY<=2001)
 L47 28 SEA ABB=ON PLU=ON L46 AND ANT/RL
 L48 2 SEA ABB=ON PLU=ON ("115:202720"/AN OR "120:265290"/AN OR
 "1991:602720"/AN OR "1994:265290"/AN) AND L47
 L49 3 SEA ABB=ON PLU=ON ("133:101716"/AN OR "133:277164"/AN OR
 "136:259544"/AN OR "2000:493753"/AN OR "2000:754453"/AN OR
 "2002:251888"/AN) AND L47

=> b hcap;d all 144 tot

FILE 'HCAPLUS' ENTERED AT 10:22:44 ON 21 OCT 2005
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FILE COVERS 1907 - 21 Oct 2005 VOL 143 ISS 18
 FILE LAST UPDATED: 20 Oct 2005 (20051020/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

L44 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:922643 HCAPLUS
 DN 139:393111
 ED Entered STN: 26 Nov 2003
 TI Microdroplet dispensing for a medical diagnostic device
 IN Harding, Ian A.; Shartle, Robert Justice; Renowitzky, Glenn; Leung, Lewis
 PA Lifescan, Inc., USA

SO U.S., 15 pp., Cont.-in-part of U.S. 6,521,182.

CODEN: USXXAM

DT Patent

LA English

IC ICM B05D003-00

ICS G01N021-75

INCL 436166000; 436169000; 422058000; 347098000; 427002110

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 14

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6830934	B1	20041214	US 1999-454196	19991203
	US 6521182	B1	20030218	US 1999-333765	19990615
	EP 1069427	A2	20010117	EP 2000-304003	20000512
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	IL 136102	A1	20040831	IL 2000-136102	20000512
	CN 1281146	A	20010124	CN 2000-118865	20000616
	CA 2313860	AA	20010116	CA 2000-2313860	20000711
	TW 472147	B	20020111	TW 2000-89114024	20000926
	SG 89361	A1	20020618	SG 2000-7245	20001127
	AU 775559	B2	20040805	AU 2000-71890	20001129
	AU 2000071890	A5	20010614		
	CA 2327305	AA	20010603	CA 2000-2327305	20001130
	EP 1107004	A2	20010613	EP 2000-310691	20001201
	EP 1107004	A3	20030416		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001201504	A2	20010727	JP 2000-367717	20001201
	RU 2256167	C2	20050710	RU 2000-130159	20001201
	CN 1301965	A	20010704	CN 2000-137319	20001202
	BR 2000005697	A	20010821	BR 2000-5697	20001204
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PRAI	US 1999-333765	A2	19990615		
	US 1998-93421P	P	19980720		
	US 1999-354995	A	19990716		
	US 1999-454196	A	19991203		
	US 2002-264662	B1	20021003		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6653145	ICM	B05D003-00
	ICS	G01N021-75
	INCL	436166000; 436169000; 422058000; 347098000; 427002110
US 6830934	NCL	436/166.000; 347/098.000; 422/058.000; 427/002.110; 436/169.000
	ECLA	B01L003/00C6M; G01N033/49B; G01N033/52C; G01N033/543K4; G01N033/558
US 6521182	NCL	422/058.000; 422/061.000; 436/069.000; 436/164.000; 436/169.000; 436/177.000
	ECLA	B01L003/00C6M; G01N033/49B; G01N033/52C; G01N033/53B2; G01N033/543K4; G01N033/558
EP 1069427	ECLA	G01N033/49B; G01N033/53B2
EP 1107004	ECLA	B01L003/00C6M; G01N033/52B; G01N033/86
CN 1301965	ECLA	B01L003/00C6M; G01N033/52B; G01N033/86
US 2002098114	NCL	422/056.000
	ECLA	B01L003/00C6M; G01N033/49B; G01N033/52B; G01N033/52C; G01N033/53B2; G01N033/543K4; G01N033/558; G01N033/86
US 2003210287	NCL	347/001.000
	ECLA	B01L003/00C6M; G01N033/49B; G01N033/52B; G01N033/52C; G01N033/53B2; G01N033/543K4; G01N033/558; G01N033/86
US 2004109790	NCL	422/058.000

ECLA B01L003/00C6M; G01N033/49B; G01N033/52C; G01N033/53B2;
G01N033/543K4; G01N033/558

AB A medical diagnostic device has a non-absorbent substrate that has a hydrophilic target area on which a reagent is deposited by non-impact printing of microdroplets. During deposition, the device is moved relative to the stream of microdroplets to form a substantially uniform reagent layer on the substrate. The device is particularly well adapted for measuring blood coagulation times. In a preferred embodiment, coagulation times are determined by monitoring the optical transmission of light through the target area as an applied blood sample interacts with the reagent.

ST microdroplet dispensing medical diagnostic device

IT Surface area
(Hydrophilic; microdroplet dispensing for a medical diagnostic device)

IT Surface
(Hydrophobic; microdroplet dispensing for a medical diagnostic device)

IT Materials
(Non-absorbent; microdroplet dispensing for a medical diagnostic device)

IT Contact angle
(Water; microdroplet dispensing for a medical diagnostic device)

IT Adhesive tapes
(double-stick; microdroplet dispensing for a medical diagnostic device)

IT Blood analysis
Blood coagulation
Body fluid
Clinical analyzers
Coating process
Coloring materials
Concentration (condition)
Diagnosis
Dispensing apparatus
Human
Light
Liquids
Optical transmission
Pipes and Tubes
Pressure
Printing (nonimpact)
Reaction
Samples
Time
(microdroplet dispensing for a medical diagnostic device)

IT Reagents
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PYP (Physical process); ANST (Analytical study); PROC (Process); USES (Uses)
(microdroplet dispensing for a medical diagnostic device)

IT Drops
(microdroplets; microdroplet dispensing for a medical diagnostic device)

IT Plastic films
(thermo-, Transparent; microdroplet dispensing for a medical diagnostic device)

IT 9002-05-5, Thromboplastin
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(microdroplet dispensing for a medical diagnostic device)

IT 7732-18-5, Water, properties
RL: PRP (Properties)
(microdroplet dispensing for a medical diagnostic device)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Anon; GB 1526708 1978 HCAPLUS
(2) Anon; WO 9402850 1994 HCAPLUS

- (3) Anon; EP 0974840 A 2000 HCAPLUS
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- (5) Davis; US 5628961 A 1997
- (6) Deeg; US 5378638 A 1995
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- (8) Gavin; US 5591403 A 1997 HCAPLUS
- (9) Hayes; US 4877745 A 1989
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- (16) Oberhardt; US 4849340 A 1989 HCAPLUS
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L44 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:892003 HCAPLUS

DN 139:347717

ED Entered STN: 14 Nov 2003

TI Multilayer reagent test strips and methods for using the same to quantify glycated protein in a physiological sample

IN Qian, Suyue; Guo, Sherry; Leong, Koon-Wah

PA Lifescan, Inc., USA

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G01N033-543

ICS C12Q001-00; C12Q001-37

CC 9-1 (Biochemical Methods)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1361436	A1	20031112	EP 2003-252921	20030509
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2003211564	A1	20031113	US 2002-144562	20020510
	US 6951728	B2	20051004		
	SG 106684	A1	20041029	SG 2003-2468	20030430
	CN 1456680	A	20031119	CN 2003-131247	20030508
	CA 2428482	AA	20031110	CA 2003-2428482	20030509
	JP 2004004071	A2	20040108	JP 2003-131819	20030509
PRAI	US 2002-144562	A	20020510		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1361436	ICM	G01N033-543
	ICS	C12Q001-00; C12Q001-37
EP 1361436	ECLA	C12Q001/26; C12Q001/37; G01N033/52C2; G01N033/543K
US 2003211564	NCL	435/023.000
	ECLA	C12Q001/26; C12Q001/37; G01N033/52C2; G01N033/543K
JP 2004004071	FTERM	2G045/AA01; 2G045/BB01; 2G045/BB50; 2G045/CA25; 2G045/DA44; 2G045/FB01; 2G045/FB17; 2G045/GC10; 2G045/JA01; 4B029/AA07; 4B029/AA21; 4B029/BB15; 4B029/BB16; 4B029/CC01; 4B029/CC03; 4B029/CC10; 4B029/CC11; 4B029/FA12; 4B063/QA01; 4B063/QA19; 4B063/QQ02; 4B063/QQ03; 4B063/QQ08; 4B063/QQ67; 4B063/QQ79; 4B063/QR03; 4B063/QR16; 4B063/QR85; 4B063/QS12; 4B063/QS28; 4B063/QS36; 4B063/QS39; 4B063/QX01

AB Multilayer reagent test strips for quantitating glycated protein in a fluid sample, as well as methods for using the same, are provided.

The subject multilayer test strips include at least a filter layer, a proteinase layer and a ketoamine oxidase signal producing and fluid flow control system layer. In using the subject test strips, a fluid sample is applied to the test strip and a signal is generated that can be employed to quantitate the glycosylated protein level in the sample. The quantitated glycosylated protein level can then be employed to determine the amount of glycosylated protein in the fluid sample. Also provided are kits and systems that include the subject test strips and find use in practicing the subject methods. The subject compns. and methods find use in glycosylated protein monitoring applications, among other utilities.

ST multilayer reagent test strip quantify glycosylated protein physiol

IT Glycoproteins

RL: ANT (Analyte); ANST (Analytical study)

(AGE (advanced glycosylation end product); multilayer reagent

test strips and methods for using the same to quantify glycosylated protein in a physiol. sample)

IT Bond

(Ketoamine; multilayer reagent test strips and methods for

using the same to quantify glycosylated protein in a physiol. sample)

IT Analytical apparatus

(Multilayer reagent test strips; multilayer reagent

test strips and methods for using the same to quantify glycosylated protein in a physiol. sample)

IT Samples

(Physiol.; multilayer reagent test strips and methods for

using the same to quantify glycosylated protein in a physiol. sample)

IT Configuration

(Stacked; multilayer reagent test strips and methods for

using the same to quantify glycosylated protein in a physiol. sample)

IT Blood

Blood plasma

Communication

Composition

Control apparatus

Erythrocyte

Filters

Flow

Fluids

Hydrophobicity

Indicators

Measuring apparatus

Multilayers

Sensors

Separation

Separators

Test kits

(multilayer reagent test strips and methods for using the

same to quantify glycosylated protein in a physiol. sample)

IT Reagents

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(multilayer reagent test strips and methods for using the

same to quantify glycosylated protein in a physiol. sample)

IT 9003-99-0, Peroxidase

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(multilayer reagent test strips and methods for using the

same to quantify glycosylated protein in a physiol. sample)

IT 9001-92-7, Proteinase 146838-32-6, Ketoamine oxidase

RL: ARG (Analytical reagent use); DEV (Device component use); ANST

(Analytical study); USES (Uses)

(multilayer reagent test strips and methods for using the

same to quantify glycosylated protein in a physiol. sample)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Genzyme; US 6008006 A 1999 HCAPLUS

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HCAPLUS

L44 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:435210 HCAPLUS

DN 138:398367

ED Entered STN: 06 Jun 2003

TI Test strips having a plurality of reaction zones and methods for using and manufacturing the same

IN Yu, Yeung Siu

PA Lifescan, Inc., USA

SO U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM C12Q001-26

INCL 435025000

CC 9-1 (Biochemical Methods)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003104510	A1	20030605	US 2001-11000	20011205
	US 6723500	B2	20040420		
	NO 2002005804	A	20030606	NO 2002-5804	20021203
	CA 2413533	AA	20030605	CA 2002-2413533	20021204
	EP 1318397	A1	20030611	EP 2002-258366	20021204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	JP 2003247996	A2	20030905	JP 2002-352801	20021204
	CN 1458526	A	20031126	CN 2002-151582	20021204
	US 2004161365	A1	20040819	US 2004-783749	20040219
PRAI	US 2001-11000	A	20011205		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003104510	ICM	C12Q001-26
	INCL	435025000
US 2003104510	NCL	435/025.000
	ECLA	G01N033/52C; G01N033/558
EP 1318397	ECLA	G01N033/52C; G01N033/558
US 2004161365	NCL	422/056.000
	ECLA	G01N033/52C; G01N033/558

AB Test strips, and methods for their manufacture and use in the determination of the concentration of at least one analyte in a physiol. sample are provided. The subject test strips have a plurality of reaction zones defined by a hydrophobic barrier. The reagent compns. present in each reaction zone may be the same or different. In addition, each reaction zone may have a sep. fluid channel, or two or more of the reaction zones may have sep. channels that merge into a single channel. In use, sample is applied to a subject test strip, a signal is detected and then related to the amount of analyte in the sample. Also provided are methods for manufacturing the subject test strips using thermal transfer technol. to apply the hydrophobic barrier. Finally, kits are provided for use in practicing the subject methods.

ST test strip plurality reaction zone manufg

IT Enzymes, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Glucose oxidizing; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Inks

(Hydrophobic; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Analytical apparatus

(Test strips; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Apparatus

(Thermal head; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Blood analysis
(glucose; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(oxidizing; test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Absorption
Biological materials
Blood analysis
Communication
Composition
Concentration (condition)
Dyes
Fluids
Lances
Measuring apparatus
Oxidation
Reaction
Standard substances, analytical
Test kits
Volume
(test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT Enzymes, uses
Reagents
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT 50-99-7, Glucose, analysis
RL: ANT (Analyte); ANST (Analytical study)
(test strips having a plurality of reaction zones and methods for using and manufacturing the same)

IT 7722-84-1, Hydrogen peroxide, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(test strips having a plurality of reaction zones and methods for using and manufacturing the same)

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (2) Anon; WO 0058730 2000 HCAPLUS
- (3) Azarnia; US 5607565 A 1997 HCAPLUS
- (4) Carpenter; US 20020138222 A1 2002
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- (6) Catt; US 6451619 B1 2002 HCAPLUS
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 (35) Rice; US D381591 S 1997
 (36) Sheinman; US 6003980 A 1999
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 (39) Wang; US 4618475 A 1986 HCAPLUS
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 (42) Whiteman; US 5830170 A 1998
 (43) Wie; US 5240844 A 1993
 (44) Yum; US 6251083 B1 2001

L44 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:330890 HCAPLUS

DN 138:333993

ED Entered STN: 30 Apr 2003

TI Multi-layer reagent test strip

IN Leong, Koon-Wah; Yu, Yeung Siu; Rice, Edward Gray

PA Lifescan, Inc., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM G01N033-48

INCL 422058000; 436169000; 436177000; 436178000

CC 9-1 (Biochemical Methods)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6555061	B1	20030429	US 2000-684716	20001005
	US 2004028557	A1	20040212	US 2003-426458	20030429
PRAI	US 2000-684716	A1	20001005		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6555061	ICM	G01N033-48
	INCL	422058000; 436169000; 436177000; 436178000
US 6555061	NCL	422/058.000; 436/169.000; 436/177.000; 436/178.000
	ECLA	G01N033/52C2; G01N033/66
US 2004028557	NCL	422/056.000
	ECLA	G01N033/52C2; G01N033/66

AB A reagent test strip for measuring an analyte concentration in a biol. fluid has a spreading mesh sandwiched between a support and a reagent matrix. The support has a through hole that is covered by the mesh. In use, a sample of the fluid is applied through the hole in the support to the spreading mesh. The sample then passes through the mesh to the matrix, which contains a reagent that indicates the analyte concentration by causing a corresponding change in reflectance at its free surface. Optionally, an adhesive layer attaches the mesh, and optionally the matrix as well, to the support. The reagent especially indicates glucose concentration

ST multilayer reagent test strip analyte body fluid; glucose multilayer reagent test strip

IT Hydrophobicity
 (adhesive having; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Body fluid
 (anal. of; multi-layer reagent test strip for measuring

analyte concentration in biol. fluid)

IT Membranes, nonbiological
(asym., as reagent matrix, with larger pores near sample receiving surface and smaller pores near testing surface; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Adhesives
(attaching spreading mesh and reagent matrix to support; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Analytical apparatus
(biochem.; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Fluids
(biol., anal. of; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Chromophores
(for glucose; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Reagents
RL: ARG (Analytical reagent use); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); USES (Uses)
(in matrix layer; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Materials
(layered, spreading mesh sandwiched between support and reagent matrix; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Polyamides, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(membrane, as reagent matrix; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Multilayers
Samples
(multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Pore size
(of anisotropic membrane for reagent matrix; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Membranes, nonbiological
(polyamide, as reagent matrix; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Dyes
(precursor, as reagent for glucose; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Adhesives
(pressure-sensitive, attaching spreading mesh and reagent matrix to support; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Colored materials
(spreading mesh as brightly; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Fluorescence
Hydrophilicity
(spreading mesh having; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Polyamide fibers, uses
Polyester fibers, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(spreading mesh of; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT Plastic films
(thermo-, support; multi-layer reagent test strip for measuring analyte concentration in biol. fluid)

IT 82-76-8, 8-Anilino-1-naphthalene sulfonic acid 4338-98-1,
 3-Methyl-2-benzothiazolinone hydrazone hydrochloride 53175-72-7,
 Dimethylaminobenzoic acid 203000-68-4
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (in dye precursor for glucose determination; multi-layer reagent test
 strip for measuring analyte concentration in biol. fluid)
 IT 50-99-7, D-Glucose, analysis
 RL: ANT (Analyte); ANST (Analytical study)
 (multi-layer reagent test strip for measuring analyte concentration
 in biol. fluid)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

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=> d all 149 tot

L49 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:251888 HCAPLUS
 DN 136:259544
 ED Entered STN: 04 Apr 2002
 TI Arrays of protein-capture agents and methods of use thereof
 IN Wagner, Peter; Nock, Steffen; Ault-Riche, Dana; Itin, Christian
 PA Zyomyx, Incorporated, USA
 SO U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 115,455.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM G01N033-543
 INCL 436518000
 CC 9-1 (Biochemical Methods)
 FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6365418	B1	20020402	US 2000-574748	20000518	<--
	US 6406921	B1	20020618	US 1998-115455	19980714	
	CA 2507754	AA	20000127	CA 1999-2507754	19990714	<--
	US 6475809	B1	20021105	US 2000-570588	20000512	<--
	US 2003003599	A1	20030102	US 2002-107122	20020326	<--
	US 2002106702	A1	20020808	US 2002-112840	20020329	<--
	US 2005008674	A1	20050113	US 2004-911945	20040804	<--
	US 2005014292	A1	20050120	US 2004-911877	20040804	<--
PRAI	US 1998-115455	A2	19980714			<--
	CA 1999-2337075	A3	19990714			<--
	US 1999-353555	A3	19990714			<--
	US 2000-574748	A1	20000518			<--
	US 2002-112840	A1	20020329			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6365418	ICM	G01N033-543
	INCL	436518000
US 6365418	NCL	436/518.000; 427/002.110; 427/134.000; 427/261.000; 427/287.000; 427/387.000; 427/407.200; 427/518.000;

435/007.100; 435/286.100; 435/287.100; 435/287.900;
 435/288.300; 435/288.400; 436/524.000; 436/525.000;
 436/527.000; 436/528.000; 436/532.000; 436/533.000;
 436/535.000; 436/536.000
 ECLA G01N033/543M; G01N033/551 <--
 US 6406921 NCL 436/518.000; 427/134.000; 427/261.000; 427/287.000;
 427/387.000; 427/407.200; 427/518.000; 435/007.100;
 435/287.100; 435/287.900; 435/288.300; 435/288.400;
 436/524.000; 436/525.000; 436/527.000; 436/528.000;
 436/532.000; 436/533.000; 436/535.000; 436/536.000
 ECLA G01N033/543M; G01N033/551
 US 6475809 NCL 436/518.000; 422/068.100; 435/004.000; 435/007.100;
 436/501.000; 436/524.000
 ECLA G01N033/543M; G01N033/551 <--
 US 2003003599 NCL 436/518.000
 ECLA G01N033/543M; G01N033/551 <--
 US 2002106702 NCL 435/007.900
 ECLA G01N033/543M; G01N033/551 <--
 US 2005008674 NCL 424/423.000
 ECLA G01N033/543M; G01N033/551 <--
 US 2005014292 NCL 436/518.000
 ECLA G01N033/543M; G01N033/551 <--
 AB Arrays of protein-capture agents useful for the simultaneous detection of
 a plurality of proteins which are the expression products, or fragments
 thereof, of a cell or population of cells in an organism are provided. A
 variety of antibody arrays, in particular, are described. Methods of both
 making and using the arrays of protein-capture agents are also disclosed.
 The invention arrays are particularly useful for various proteomics
 applications including assessing patterns of protein expression and
 modification in cells.
 ST array protein capture agent
 IT Chemical chains
 Monolayers
 (Hydrophilic; arrays of protein-capture agents and methods of use
 thereof)
 IT Reagents
 RL: ARG (Analytical reagent use); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (Protein-capture; arrays of protein-capture agents and methods of use
 thereof)
 IT Cell
 Chemisorption
 Hydrophilicity
 Hydrophobicity
 Interface
 Photolithography
 Physisorption
 (arrays of protein-capture agents and methods of use thereof)
 IT Proteins
 Proteome
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST
 (Analytical study); BIOL (Biological study)
 (arrays of protein-capture agents and methods of use thereof)
 IT Antibodies and Immunoglobulins
 RL: ARG (Analytical reagent use); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (arrays of protein-capture agents and methods of use thereof)
 IT Analytical apparatus
 (arrays; arrays of protein-capture agents and methods of use thereof)
 IT Bond
 (covalent; arrays of protein-capture agents and methods of use thereof)
 IT Gene
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (expression; arrays of protein-capture agents and methods of use
 thereof)
 IT Antibodies and Immunoglobulins

RL: ANT (Analyte); ANST (Analytical study)
(fragments; arrays of protein-capture agents and methods of use thereof)

IT Monolayers
(hydrophobic; arrays of protein-capture agents and methods of use thereof)

IT Animal cell
(mammalian; arrays of protein-capture agents and methods of use thereof)

IT Immobilization, molecular or cellular
(protein; arrays of protein-capture agents and methods of use thereof)

RE.CNT 125 THERE ARE 125 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (3) Anon; WO 9116425 1991 HCAPLUS
- (4) Anon; WO 9321528 1993 HCAPLUS
- (5) Anon; EP 596421 A1 1994 HCAPLUS
- (6) Anon; JP 6041183 1994
- (7) Anon; WO 9850773 1994 HCAPLUS
- (8) Anon; JP 7084372 1995
- (9) Anon; WO 9508770 1995 HCAPLUS
- (10) Anon; WO 9535505 1995 HCAPLUS
- (11) Anon; WO 9602830 1996 HCAPLUS
- (12) Anon; WO 9610178 1996 HCAPLUS
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L49 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:754453 HCAPLUS
 DN 133:277164
 ED Entered STN: 26 Oct 2000
 TI Multiple micro-arrays
 IN Leighton, Stephen B.
 PA USA
 SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 344,544.
 CODEN: USXXAM

DT Patent
 LA English
 IC ICM C12M003-00
 ICS C12Q001-68; G01N021-00

INCL 435288700

CC 3-1 (Biochemical Genetics)
 Section cross-reference(s): 9

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6136592	A	20001024	US 1999-413956	19991007 <--
	CA 2425634	AA	20020418	CA 2000-2425634	20001010 <--
	WO 2002031106	A1	20020418	WO 2000-US27925	20001010 <--
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 2000080042	A5	20020422	AU 2000-80042	20001010 <--
	EP 1325108	A1	20030709	EP 2000-970705	20001010 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
	JP 2004511761	T2	20040415	JP 2002-534477	20001010 <--
PRAI	US 1999-344544	A2	19990625	<--	
	WO 2000-US27925	W	20001010	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6136592	ICM	C12M003-00
	ICS	C12Q001-68; G01N021-00
	INCL	435288700
US 6136592	NCL	435/288.700; 422/050.000; 422/058.000; 435/006.000; 435/287.200
	ECLA	B01L003/00C6M; C12M003/04 <--
WO 2002031106	ECLA	B01L003/00C6M; C12M003/04 <--
JP 2004511761	FTERM	4B024/AA11; 4B024/AA19; 4B024/AA20; 4B024/CA01; 4B024/CA04; 4B024/CA09; 4B024/CA11; 4B024/HA13; 4B024/HA14; 4B024/HA20; 4B029/AA07; 4B029/AA23; 4B029/BB20; 4B029/CC01; 4B029/CC02; 4B029/CC03; 4B029/CC08; 4B029/FA12; 4B029/FA15 <--

AB A method and device are provided for simultaneously creating a plurality of identical micro-arrays of biol. samples. The invention utilizes a plurality of substrates, each of which having a top side, a bottom side, and a pattern of through-holes. Each through-hole has a wider upper

cross-section, a narrower lower cross-section, and a step or plateau formed in the transition area. When the substrates are stacked, through-holes are in registry and form tunnels extending through the stack of substrates. Reagents of interest are caused to flow through the tunnels and deposit on the step or plateau area. A barrier layer may be provided to prevent leak-through between neighboring holes. After the desired reagents have been deposited, the substrates are separated. In this manner a series of micro-arrays, each capable of containing hundreds or thousands of biol. samples such as cDNA fragments, is formed simultaneously.

ST micro array
 IT Analytical apparatus
 (Multiple micro-arrays; multiple micro-arrays)
 IT Viscous materials
 (hydrophobic; multiple micro-arrays)
 IT Biological materials
 Flow
 Fluids
 Nucleic acid hybridization
 Tunnels
 (multiple micro-arrays)
 IT cDNA
 RL: ANT (Analyte); ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
 (multiple micro-arrays)
 IT Reagents
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (multiple micro-arrays)
 IT Glass, uses
 RL: DEV (Device component use); USES (Uses)
 (multiple micro-arrays)
 IT Synthetic rubber, uses
 RL: DEV (Device component use); USES (Uses)
 (polymeric; multiple micro-arrays)
 IT Sealing
 (water impermeable; multiple micro-arrays)
 IT Adhesives
 (weak; multiple micro-arrays)
 IT 7440-21-3, Silicon, uses
 RL: DEV (Device component use); USES (Uses)
 (multiple micro-arrays)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (2) Kricka; US 5744366 1998
- (3) Wilding; US 5486335 1996 HCAPLUS

L49 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:493753 HCAPLUS

DN 133:101716

ED Entered STN: 21 Jul 2000

TI Disposable test strips with integrated reagent/blood separation layer

IN Mcaleer, Jerome F.; Scott, David; Hall, Geoff; Alvarez-Icaza, Manuel; Plotkin, Elliott V.; Davies, Oliver W. H.

PA Selfcare, Inc., USA

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM G01N027-26

CC 9-1 (Biochemical Methods)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2000042422	A1	20000720	WO 2000-US620	20000111 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6241862 B1 20010605 US 1999-228855 19990112 <--
CA 2358464 AA 20000720 CA 2000-2358464 20000111 <--
BR 2000008615 A 20011016 BR 2000-8615 20000111 <--
EP 1155310 A1 20011121 EP 2000-906895 20000111 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002535615 T2 20021022 JP 2000-593945 20000111 <--
JP 3699898 B2 20050928
AU 763723 B2 20030731 AU 2000-28479 20000111 <--
PRAI US 1999-228855 A1 19990112 <--
US 1996-601223 A1 19960214 <--
US 1998-5710 A2 19980112 <--
WO 2000-US620 W 20000111 <--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000042422	ICM	G01N027-26
WO 2000042422	ECLA	C12Q001/00B6B; C12Q001/00B4; C12Q001/54; G01N033/487B2
US 6241862	NCL	204/403.050; 204/403.110; 204/415.000; 427/002.130
	ECLA	C12Q001/00B2; C12Q001/00B4; G01N033/50B

AB An improved disposable glucose test strip is disclosed for use in a test meter of the type which receives a disposable test strip and a sample of blood from a patient and performs an electrochem. anal. using a non-conductive integrated reagent/blood separation layer (17) containing a filler, an enzyme effective to oxidize glucose, e.g., glucose oxidase, and a mediator effective to transfer electrons from the enzyme. The integrated layer formulation is printed over a conductive carbon element (16) to form a working electrode. The filler, for example a silica filler, is selected to have a balance of hydrophobicity such that on drying it forms a two-dimensional network on the surface of the conductive element. The response of this test strip is essentially temperature independent over relevant temperature ranges and is substantially insensitive to the hematocrit of the patient.

ST disposable test strip integrated reagent blood sepn layer;
glucose test strip independent temp hematocrit

IT Polyesters, uses
RL: DEV (Device component use); USES (Uses)
(as substrate; disposable test strips with integrated reagent /blood separation layer)

IT **Analytical apparatus**
Blood analysis
Electrochemical analysis
Electrodes
Fillers
Films
Glucose sensors
(disposable test strips with integrated reagent/blood separation layer)

IT Enzymes, biological studies
Reagents
RL: ARG (Analytical reagent use); DEV (Device component use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(disposable test strips with integrated reagent/blood separation layer)

IT Blood cell

(exclusion of; disposable test strips with integrated reagent
/blood separation layer)

IT Electric insulators
(layer of; disposable test strips with integrated reagent
/blood separation layer)

IT Separation
(of blood, layer for; disposable test strips with integrated
reagent/blood separation layer)

IT Blood
(separation layer for; disposable test strips with integrated
reagent/blood separation layer)

IT Hematocrit
Temperature
(test strip response insensitive to; disposable test strips with
integrated reagent/blood separation layer)

IT 256219-76-8, Ercon R 488B(HV)B2 Blue
RL: DEV (Device component use); USES (Uses)
(as dielec. layer; disposable test strips with integrated
reagent/blood separation layer)

IT 13408-62-3, Ferricyanide
RL: ARU (Analytical role, unclassified); DEV (Device component use); THU
(Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES
(Uses)
(as redox mediator; disposable test strips with integrated
reagent/blood separation layer)

IT 7440-44-0, Carbon, uses
RL: DEV (Device component use); USES (Uses)
(conductive element of; disposable test strips with integrated
reagent/blood separation layer)

IT 50-99-7, D-Glucose, analysis
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical
study); BIOL (Biological study); USES (Uses)
(disposable test strips with integrated reagent/blood separation
layer)

IT 9001-37-0, Glucose oxidase
RL: ARG (Analytical reagent use); DEV (Device component use); THU
(Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES
(Uses)
(disposable test strips with integrated reagent/blood separation
layer)

IT 9004-62-0, Hydroxyethyl cellulose
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST
(Analytical study); USES (Uses)
(disposable test strips with integrated reagent/blood separation
layer)

IT 13746-66-2, Potassium hexacyanoferrate(III)
RL: ARU (Analytical role, unclassified); DEV (Device component use); THU
(Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES
(Uses)
(disposable test strips with integrated reagent/blood separation
layer)

IT 7631-86-9, Silica, uses
RL: DEV (Device component use); USES (Uses)
(disposable test strips with integrated reagent/blood separation
layer)

IT 68-04-2, Trisodium citrate 77-92-9, Citric acid, analysis 9002-89-5,
Polyvinyl alcohol 25086-89-9
RL: ARU (Analytical role, unclassified); PEP (Physical, engineering or
chemical process); THU (Therapeutic use); ANST (Analytical study); BIOL
(Biological study); PROC (Process); USES (Uses)
(in ink for printing glucose test strips; disposable test strips with
integrated reagent/blood separation layer)

IT 158766-37-1, Cab-o-Sil TS610 284025-29-2, Spherisorb C4
RL: DEV (Device component use); USES (Uses)
(nonconductive layer containing; disposable test strips with integrated
reagent/blood separation layer)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Jones; EP 0207370 A2 1987 HCAPLUS
- (2) Maley; US 5601694 A 1997 HCAPLUS
- (3) Nankai; US 5185256 A 1993 HCAPLUS

=> b wpix;d all l33 tot

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FOR DETAILS. <<<
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L33 ANSWER 1 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2004-787112 [78] WPIX

DNN N2004-620447 DNC C2004-275357

TI Test strip for use in detection of analyte, e.g. blood glucose in liquid
sample, e.g. whole blood sample, comprises base support layer, and reagent
pad disposed on base support layer.

DC B04 D16 S03

IN MATZINGER, D P; SHARTLE, R J

PA (LIFE-N) LIFESCAN INC; (MATZ-I) MATZINGER D P; (SHAR-I) SHARTLE
R J

CYC 38

PI EP 1473563 A2 20041103 (200478)* EN 14 G01N033-52 <--
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU
LV MC MK NL PL PT RO SE SI SK TR

CA 2465799 A1 20041029 (200478) EN G01N033-52 <--

JP 2004325456 A 20041118 (200478) 17 G01N033-543

US 2004219691 A1 20041104 (200478) G01N033-543

CN 1550771 A 20041201 (200516) G01N021-29

KR 2004093628 A 20041106 (200517) G01N033-487 <--

ADT EP 1473563 A2 EP 2004-252450 20040428; CA 2465799 A1 CA 2004-2465799
20040429; JP 2004325456 A JP 2004-133925 20040428; US 2004219691 A1 US
2003-426457 20030429; CN 1550771 A CN 2004-45161 20040429; KR 2004093628 A
KR 2004-30135 20040429

PRAI US 2003-426457 20030429

IC ICM G01N021-29; G01N033-487; G01N033-52; G01N033-543

ICS C12M001-34; G01N021-78; G01N033-558

AB EP 1473563 A UPAB: 20041206

NOVELTY - A test strip has base support layer (102), and reagent pad (104) disposed on base support layer. A portion of the base support layer in proximity to the reagent pad is formed of a clear material such that a user can perceive the liquid sample through the base support layer during application of the liquid sample to the pad.

USE - The test strip is useful for the detection of an analyte, e.g. blood glucose in liquid sample, e.g. whole blood sample (claimed).

ADVANTAGE - The invention is easy to manipulate and provides for user perception of the liquid sample during its application to the test strip. It is simple to manufacture and prevents excess liquid sample from creating an untidy condition or contaminating an associated device.

DESCRIPTION OF DRAWING(S) - The figure is a simplified depiction of a manner by which the user can perceive the liquid sample through the test strip.

Base support layer 102

Reagent pad 104

Dwg.2/9

FS CPI EPI

FA AB; GI; DCN

MC CPI: B04-B04D5; B10-A07; B11-C08; B12-K04A; D05-H09

EPI: S03-E04E; S03-E14H1

L33 ANSWER 2 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2004-614823 [59] WPIX

DNC C2004-221447

TI Test strip for determining analyte concentration in physiological sample e.g. glucose in blood comprises hydrophobic barrier separating reaction zones.

DC B04 D16 J04

IN SIU YU, Y

PA (YUYY-I) SIU YU Y

CYC 1

PI US 2004161365 A1 20040819 (200459)* 16 C12Q001-66 <--

ADT US 2004161365 A1 Div ex US 2001-11000 20011205, US 2004-783749 20040219

FDT US 2004161365 A1 Div ex US 6723500

PRAI US 2001-11000 20011205; US 2004-783749 20040219

IC ICM C12Q001-66

AB US2004161365 A UPAB: 20040915

NOVELTY - A test strip comprising reaction zones (20 - 22) defined by a barrier comprising hydrophobic ink and a reagent composition comprising at least one member of an analyte oxidation based signal producing system present in each reaction zone, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) manufacturing the reaction zones of the strip; and

(2) a kit comprising the test strip(s) and instructions for using the strip.

USE - The test strip is useful for determining concentration of at least one analyte in a physiological sample e.g. glucose concentration (claimed) in blood.

ADVANTAGE - Contamination of reaction zones is minimized or eliminated. The test strip is easy to use and manufactured easily at low cost. The results are accurate, precise and reproducible.

DESCRIPTION OF DRAWING(S) - The figure shows perspective view of the test strip.

Reaction zones 20 - 22

Bottom layer 30

Intermediate layer 500

Dwg.3/5

FS CPI

FA AB; GI; DCN

MC CPI: B04-B04D5; B10-A07; B11-C08; B11-C09; B12-K04A;

D05-H09; J04-B01B; J04-C04

L33 ANSWER 3 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2004-356199 [33] WPIX

DNC C2004-135369

TI Producing tissue factor-based prothrombin time (PT) reagent by combining tissue factor (TF), phospholipid, detergent-containing buffer to create TF/phospholipid mixture, removing detergent, creating tissue factor-based PT reagent.

DC B04 D16

IN EARP, B; HALEY, P; JENNY, R; HALEY, P E

PA (LIFE-N) LIFESCAN INC; (EARP-I) EARP B; (HALE-I) HALEY P E;
(JENN-I) JENNY R

CYC 36

PI US 2004086953 A1 20040506 (200433)* 8 C12Q001-56 <--
EP 1418435 A1 20040512 (200433) EN G01N033-86
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV
MC MK NL PT RO SE SI SK TR
CA 2448188 A1 20040505 (200436) EN C12Q001-56 <--
JP 2004157122 A 20040603 (200436) 13 G01N033-86
KR 2004040384 A 20040512 (200459) C12Q001-56 <--
CN 1523358 A 20040825 (200477) G01N033-86

ADT US 2004086953 A1 US 2002-288249 20021105; EP 1418435 A1 EP 2003-256966
20031104; CA 2448188 A1 CA 2003-2448188 20031105; JP 2004157122 A JP
2003-374727 20031104; KR 2004040384 A KR 2003-78000 20031105; CN 1523358 A
CN 2003-1120463 20031105

PRAI US 2002-288249 20021105

IC ICM C12Q001-56; G01N033-86
ICS C07K014-745; C12Q001-37

AB US2004086953 A UPAB: 20040525
NOVELTY - Producing (M1) tissue factor-based prothrombin time (PT) reagent, by combining predetermined quantities of tissue factor (TF), phospholipid and detergent-containing buffer to create a mixture, where predetermined quantity of TF is based on its measured TF activity, removing detergent from the mixture to create essentially detergent-free TF/phospholipid vesicle mixture and creating tissue factor-based PT reagent.
DETAILED DESCRIPTION - Producing (M1) tissue factor-based prothrombin time (PT) reagent, by combining predetermined quantities of tissue factor (TF), phospholipid and detergent-containing buffer to create TF/phospholipid mixture, where predetermined quantity of TF is based on its measured TF activity, removing detergent from TF/phospholipid mixture to create essentially detergent-free TF/phospholipid vesicle mixture and creating tissue factor-based PT reagent.
USE - (M1) is useful for producing tissue factor-based prothrombin time (PT) reagent (claimed).
ADVANTAGE - (M1) is efficient and simple in producing tissue factor-based prothrombin time (PT) reagent at reproducible yield and provides for acceptance testing of the produced PT reagent.
DESCRIPTION OF DRAWING(S) - The figure shows a flow chart representing the production of tissue factor-based prothrombin time reagent.
Dwg.1/3

FS CPI

FA AB; GI; DCN

MC CPI: B04-B01B; B04-H1900E; B05-B01P; B11-C07B3; B12-K04E;
D05-H09

L33 ANSWER 4 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2003-879928 [82] WPIX

DNN N2003-702378 DNC C2003-249069

TI Multilayer test strip comprising, blood separation element, protease layer in fluid communication with the element, and ketoamine oxidase signal producing system layer in fluid communication with the protease layer.

DC B04 D16 S03

IN GUO, S; LEONG, K; QIAN, S

PA (LIFE-N) LIFESCAN INC; (LIFE-N) LIFESCAN CORP;
(GUOS-I) GUO S; (LEON-I) LEONG K; (QIAN-I) QIAN S

CYC 37

PI EP 1361436 A1 20031112 (200382)* EN 18 G01N033-543
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV

MC MK NL PT RO SE SI SK TR

US 2003211564 A1 20031113 (200382) C12Q001-37 <--

CA 2428482 A1 20031110 (200403) EN C12Q001-37 <--

JP 2004004071 A 20040108 (200405) 51 G01N033-48 <--

CN 1456680 A 20031119 (200412) C12Q001-37 <--

SG 106684 A1 20041029 (200476) G01N033-54

IN 2003000217 I2 20041204 (200531) EN G01N033-48 <--

US 6951728 B2 20051004 (200565) C12Q001-54 <--

ADT EP 1361436 A1 EP 2003-252921 20030509; US 2003211564 A1 US 2002-144562
20020510; CA 2428482 A1 CA 2003-2428482 20030509; JP 2004004071 A JP
2003-131819 20030509; CN 1456680 A CN 2003-131247 20030508; SG 106684 A1
SG 2003-2468 20030430; IN 2003000217 I2 IN 2003-KO217 20030411; US 6951728
B2 US 2002-144562 20020510

PRAI US 2002-144562 20020510

IC ICM C12Q001-37; C12Q001-54; G01N033-48;
G01N033-54; G01N033-543

ICS C12M001-34; C12Q001-00; C12Q001-26;
C12Q001-28; G01N021-78; G01N033-487;
G01N033-49; G01N033-50; G01N033-68

AB EP 1361436 A UPAB: 20031223
NOVELTY - A multilayer test strip (I) comprising, a blood separation
element for separating red blood cells from plasma, a protease layer in
fluid communication with the blood separation element, and a ketoamine
oxidase signal producing system layer in fluid communication with the
protease layer.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:
(1) a measurement system for measuring an amount of glyated protein
in a fluid sample, comprising (I), and a signal detection instrument for
detecting signal produced on the multilayer test strip;
(2) quantifying the amount of glyated protein in a physiological
sample, involves applying the physiological sample to (I), detecting a
signal produced on the test strip to quantify the amount of glyated
protein in the physiological sample;
(3) a kit for use in determining the concentration of glyated
protein in a physiological sample, comprising (I), and a unit for
obtaining a physiological sample or a control; and
(4) a signal detection instrument having (I).
USE - (I) is useful for determining the concentration of glyated
protein, ketoamine group on protein and blood glucose levels.
DESCRIPTION OF DRAWING(S) - The figure shows an exploded view of a
multilayer reagent test strip.
Dwg.1/3

FS CPI EPI

FA AB; GI

MC CPI: B04-B04D5; B04-F04; B04-L05C; B11-B; B11-C09; D05-A02C; D05-C03C;
D05-H09; D05-H13
EPI: S03-E14H4

L33 ANSWER 5 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2003-810336 [76] WPIX

CR 2004-224961 [21]

DNN N2003-648816 DNC C2003-224927

TI Test strip for measuring glucose concentration, comprises support, mesh
and reagent matrix attached to and separated from surface of mesh by
adhesive layer such that capillary gap is present between mesh and reagent
matrix.

DC A89 B04 D16 E24 S03

IN LEONG, K; RICE, E G; YU, Y S

PA (LIFE-N) LIFESCAN INC

CYC 1

PI US 6555061 B1 20030429 (200376)* 5 G01N033-48 <--

ADT US 6555061 B1 US 2000-684716 20001005

PRAI US 2000-684716 20001005

IC ICM G01N033-48

AB US 6555061 B UPAB: 20040326

NOVELTY - Reagent test strip (10) for use in apparatus for measuring analyte concentration, comprises support (14) having through-hole for passing sample, mesh (12), reagent matrix (16) attached to second surface of the mesh and an adhesive (18) layer. The reagent matrix is attached to and separated from the second surface of the mesh by adhesive layer such that a capillary gap is present between the mesh and reagent matrix.

DETAILED DESCRIPTION - Reagent test strip for use in an apparatus for measuring analyte concentration in biological fluid, comprises:

- (1) a support having through-hole for passing sample of biological fluid;
- (2) a mesh, having a first surface joining the bottom surface of and covering the hole in the support;
- (3) a reagent matrix attached to second surface of the mesh, opposite the first surface, the matrix comprising:
 - (i) a sample receiving surface for receiving the sample from the mesh and passing at least a portion of the sample towards a testing surface opposite to the receiving surface;
 - (ii) a reagent for indicating the analyte concentration by creating at the testing surface a change in reflectance that can be related to the analyte concentration; and
- (4) an adhesive layer.

The reagent matrix is attached to and separated from the second surface of the mesh by adhesive layer such that a capillary gap is present between the mesh and reagent matrix.

USE - The reagent test strip is useful in an apparatus for measuring the analyte concentration in a biological fluid (claimed), e.g., monitoring glucose level in whole blood.

ADVANTAGE - The method enables to obtain accurate value of analyte concentration using smaller sample size.

DESCRIPTION OF DRAWING(S) - The figure shows perspective view of the test strip.

reagent test strip 10

mesh 12

support 14

reagent matrix 16

adhesive 18

Dwg.1/2

FS CPI EPI

FA AB; GI; DCN

MC CPI: A12-V03C2; B04-B04D5; B10-A07; B11-C07B1; B12-K04A;

D05-H09; E06-F01; E10-A09B2; E10-B02A1; E26-A01

EPI: S03-E04E; S03-E09E; S03-E14H1

L33 ANSWER 6 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2003-801235 [75] WPIX

DNC C2003-221203

TI Test strip for determining the concentration of analyte(s) in physiological sample, has reaction zones each defined by hydrophobic barrier, and reagent composition.

DC B04 D16

IN YU, Y S; YU, S

PA (LIFE-N) LIFESCAN INC; (YUYS-I) YU Y S

CYC 39

PI	US 2003104510	A1	20030605	(200375)*	16	C12Q001-26	<--
	CA 2413533	A1	20030605	(200375) EN		G01N033-52	<--
	EP 1318397	A1	20030611	(200375) EN		G01N031-22	
	R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC						
	MK NL PT RO SE SI SK TR						
	JP 2003247996	A	20030905	(200375)	15	G01N033-543	
	KR 2003046315	A	20030612	(200375)		G01N033-49	<--
	NO 2002005804	A	20030606	(200375)		G01N033-52	<--
	CN 1458526	A	20031126	(200413)		G01N033-52	<--
	US 6723500	B2	20040420	(200427)		C12Q001-00	<--
	AU 2002302090	A1	20030619	(200461)		G01N033-531	<--
	MX 2002011970	A1	20040701	(200545)		C12M001-34	
	TW 2003005015	A	20031016	(200557)		G01N033-48	<--

ADT US 2003104510 A1 US 2001-11000 20011205; CA 2413533 A1 CA 2002-2413533
 20021204; EP 1318397 A1 EP 2002-258366 20021204; JP 2003247996 A JP
 2002-352801 20021204; KR 2003046315 A KR 2002-76491 20021204; NO
 2002005804 A NO 2002-5804 20021203; CN 1458526 A CN 2002-151582 20021204;
 US 6723500 B2 US 2001-11000 20011205; AU 2002302090 A1 AU 2002-302090
 20021126; MX 2002011970 A1 MX 2002-11970 20021203; TW 2003005015 A TW
 2002-135112 20021204

PRAI US 2001-11000 20011205

IC ICM C12M001-34; C12Q001-00; C12Q001-26; G01N031-22;
 G01N033-48; G01N033-49; G01N033-52;
 G01N033-531; G01N033-543

ICS C12M003-00; C12Q001-54; G01N033-53; G01N033-66

AB US2003104510 A UPAB: 20031120

NOVELTY - A test strip for determining the concentration of analyte(s) in
 a physiological sample, comprising reaction zones (20-24); and a reagent
 composition present in each reaction zone, is new. Each reaction zone is
 defined by a hydrophobic barrier.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(1) manufacturing the reaction zones of the test strip, comprising
 positioning a thermal head in alignment with a test strip matrix, and
 actuating the thermal head in a manner to transfer a volume of
 hydrophobic composition onto the matrix; and

(2) a kit for determining the concentration of analyte(s) in the
 physiological sample, comprising the novel test strip(s), and instructions
 for using the test strip.

The hydrophobic composition is deposited on the matrix to
 produce the test strip comprising the reaction zones. Each zone is defined
 by the hydrophobic composition.

USE - For determining the concentration of analyte(s) in a
 physiological sample, by applying the sample to the test strip, detecting
 a signal produced by the reaction of the reagent composition with the
 sample, and relating the detected signal to the amount of the analyte in
 the sample (claimed).

ADVANTAGE - The invention is simple to use, accurate, precise and
 easy, and low cost to manufacture.

DESCRIPTION OF DRAWING(S) - The drawing shows an exemplary test strip
 matrix.

Reaction zones 20-24.

Dwg.1/5

FS CPI

FA AB; GI; DCN

MC CPI: B04-L01; B05-C08; B10-A07; B11-C08E3; B12-K04A;
 D05-H09

L33 ANSWER 7 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2001-618346 [72] WPIX

CR 1999-336791 [28]; 2000-248299 [22]

DNN N2001-461238 DNC C2001-185117

TI Enzymatic assay reagent containing a tetrazolium dye precursor, especially
 useful for blood glucose determination, includes a nitrite salt to
 suppress interference from hemoglobin.

DC A89 B04 D16 E24 S03

IN OUYANG, T; YU, Y S; SIU YU, Y

PA (LIFE-N) LIFESCAN INC; (JOHJ) JOHNSON & JOHNSON; (OUYA-I) OUYANG T;
 (YUYS-I) YU Y S

CYC 37

PI EP 1130111 A2 20010905 (200172)* EN 13 C12Q001-54 <--
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 AU 2001023210 A 20010830 (200172) C12Q001-26 <--
 CA 2337562 A1 20010825 (200172) EN C12Q001-54 <--
 NO 2001000939 A 20010827 (200172) G01N000-00
 JP 2001292795 A 20011023 (200202) 41 C12Q001-26 <--
 BR 2001002467 A 20011204 (200203) G01N033-52 <--
 CN 1317575 A 20011017 (200213) C12Q001-54 <--
 KR 2001085564 A 20010907 (200218) C12Q001-26 <--

ZA 2001001543 A 20021030 (200282) 34 C12Q000-00
 MX 2001002062 A1 20020901 (200373) C12Q001-54 <--
 US 6656697 B1 20031202 (200379) G01N033-553
 SG 100621 A1 20031226 (200414) C12Q001-54 <--
 US 2004053352 A1 20040318 (200421) C12Q001-26 <--
 EP 1130111 B1 20041006 (200466) EN C12Q001-54 <--
 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
 DE 60106110 E 20041111 (200474) C12Q001-54 <--
 ES 2230240 T3 20050501 (200532) C12Q001-54 <--
 US 2005112712 A1 20050526 (200535) C12Q001-54 <--
 AU 782774 B2 20050825 (200562) C12Q001-26 <--
 MX 225355 B 20050105 (200566) C12Q001-26 <--
 ADT EP 1130111 A2 EP 2001-301670 20010223; AU 2001023210 A AU 2001-23210
 20010223; CA 2337562 A1 CA 2001-2337562 20010222; NO 2001000939 A NO
 2001-939 20010223; JP 2001292795 A JP 2001-49366 20010223; BR 2001002467 A
 BR 2001-2467 20010223; CN 1317575 A CN 2001-116251 20010224; KR 2001085564
 A KR 2001-9448 20010224; ZA 2001001543 A ZA 2001-1543 20010223; MX
 2001002062 A1 MX 2001-2062 20010226; US 6656697 B1 CIP of US 1998-161876
 19980928, CIP of US 1999-282083 19990330, US 2000-513071 20000225; SG
 100621 A1 SG 2001-1038 20010222; US 2004053352 A1 CIP of US 1998-161876
 19980928, CIP of US 1999-282083 19990330, Div ex US 2000-513071 20000225,
 US 2003-663217 20030915; EP 1130111 B1 EP 2001-301670 20010223; DE
 60106110 E DE 2001-00106110 20010223, EP 2001-301670 20010223; ES 2230240
 T3 EP 2001-301670 20010223; US 2005112712 A1 CIP of US 1998-161876
 19980928, CIP of US 1999-282083 19990330, Div ex US 2000-513071 20000225,
 Div ex US 2003-663217 20030915, US 2004-990684 20041116; AU 782774 B2 AU
 2001-23210 20010223; MX 225355 B MX 2001-2062 20010226
 FDT US 6656697 B1 CIP of US 5902731, CIP of US 6200773; US 2004053352 A1 CIP
 of US 5902731, CIP of US 6200773, Div ex US 6656697; DE 60106110 E Based
 on EP 1130111; ES 2230240 T3 Based on EP 1130111; US 2005112712 A1 CIP of
 US 5902731, CIP of US 6200773, Div ex US 6656697; AU 782774 B2 Previous
 Publ. AU 2001023210
 PRAI US 2000-513071 20000225; US 1998-161876 19980928;
 US 1999-282083 19990330; US 2003-663217 20030915;
 US 2004-990684 20041116
 IC ICM C12Q000-00; C12Q001-26; C12Q001-54; G01N000-00;
 G01N033-52; G01N033-553
 ICS C12Q001-34; G01N021-78; G01N033-64; G01N033-66; G01N033-72
 AB EP 1130111 A UPAB: 20051014
 NOVELTY - Reagent (I) for measuring the concentration of an analyte in a
 hemoglobin-containing biological fluid comprises:
 (A) an analyte-specific flavin dependent enzyme;
 (B) a tetrazolium dye precursor;
 (C) an electron transfer agent; and
 (D) a nitrite salt.
 DETAILED DESCRIPTION - Reagent (I) for measuring the concentration of
 an analyte in a hemoglobin-containing biological fluid comprises:
 (a) an analyte-specific flavin dependent enzyme that either has a
 flavin bound to it or is present together with flavin mononucleotide (FMN)
 or flavin adenine dinucleotide (FAD);
 (b) a tetrazolium dye precursor;
 (c) an electron transfer agent; and
 (d) a nitrite salt.
 INDEPENDENT CLAIMS are also included for the following:
 (1) a dry reagent strip for measuring the concentration of an analyte
 in a hemoglobin-containing biological fluid, comprising a support layer
 bearing a test pad coated with (I);
 (2) a dry reagent strip for measuring the concentration of glucose in
 a hemoglobin-containing biological fluid, comprising:
 (a) a bottom support layer;
 (b) a middle test pad having a coating comprising glucose oxidase
 that has a flavin bound to it, a tetrazolium dye precursor and phenazine
 methosulfate (PMS) or a PMS analog; and
 (c) a bibulous top layer coated with a nitrite salt;
 (3) a dry reagent strip for measuring the concentration of glucose in
 a hemoglobin-containing biological fluid, comprising:

- (a) a bottom support layer;
- (b) a middle test pad having a coating comprising a flavin-dependent enzyme that does not have a flavin bound to it, FMN or FAD, a tetrazolium dye precursor and PMS or a PMS analog; and
- (c) a bibulous top layer coated with a nitrite salt.

USE - The reagent is especially useful for determining blood glucose levels, preferably as a coating on a dry test strip.

ADVANTAGE - The nitrite overcomes interference from hemoglobin.

Dwg.0/6

FS CPI EPI

FA AB; DCN

MC CPI: A12-L04B; A12-V03C2; B04-B04D5; B04-L03A; B05-B01M; B05-C03; B06-H;
B10-A07; B11-C07B1; B12-K04A; D05-A01A2; D05-A01B1;
D05-H09; E25-E01
EPI: S03-E14H

L33 ANSWER 8 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2000-248299 [22] WPIX

CR 1999-336791 [28]; 2001-618346 [72]

DNN N2000-185899 DNC C2000-075259

TI Reagent for measuring the concentration of an analyte, e.g. beta-hydroxybutyrate or glucose, in a haemoglobin-containing biological fluid is based on a tetrazolium dye.

DC B04 D16 S03

IN OUYANG, T; YU, Y S; SIU YU, Y; SIU, Y Y; TIANMEI, O

PA (LIFE-N) LIFESCAN INC; (JOHJ) JOHNSON & JOHNSON

CYC 39

PI EP 990706 A1 20000405 (200022)* EN 14 C12Q001-32 <--
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI

AU 9944743 A 20000330 (200026) C12Q001-32 <--

JP 2000093199 A 20000404 (200027) 8 C12Q001-32 <--

NO 9902026 A 20000329 (200027) C12Q001-32 <--

BR 9901431 A 20000509 (200033) C12Q001-32 <--

CN 1249349 A 20000405 (200034) C12Q001-32 <--

CA 2270334 A1 20000328 (200036) EN C12Q001-54 <--

ZA 9902952 A 20001227 (200103) 27 G01N000-00

KR 2000022630 A 20000425 (200107) G01N033-72

US 6200773 B1 20010313 (200120) C12Q001-32 <--

MX 9904096 A1 20000801 (200137) G01N033-72

SG 82610 A1 20010821 (200158) C12Q001-32 <--

EP 990706 B1 20020904 (200266) EN C12Q001-32 <--

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

DE 69902730 E 20021010 (200274) C12Q001-32 <--

ES 2183482 T3 20030316 (200325) C12Q001-32 <--

AU 763065 B 20030710 (200355) C12Q001-32 <--

MX 211939 B 20021209 (200413) C12M001-40

RU 2225005 C2 20040227 (200425) G01N033-50 <--

IL 129594 A 20040620 (200446) G01N033-50 <--

TW 594009 A 20040621 (200506) G01N033-50 <--

ADT EP 990706 A1 EP 1999-303260 19990427; AU 9944743 A AU 1999-44743 19990826;

JP 2000093199 A JP 1999-128731 19990510; NO 9902026 A NO 1999-2026

19990428; BR 9901431 A BR 1999-1431 19990511; CN 1249349 A CN 1999-108090

19990508; CA 2270334 A1 CA 1999-2270334 19990428; ZA 9902952 A ZA

1999-2952 19990426; KR 2000022630 A KR 1999-16786 19990511; US 6200773 B1

CIP of US 1998-161876 19980928, US 1999-282083 19990330; MX 9904096 A1 MX

1999-4096 19990430; SG 82610 A1 SG 1999-2107 19990503; EP 990706 B1 EP

1999-303260 19990427; DE 69902730 E DE 1999-602730 19990427, EP

1999-303260 19990427; ES 2183482 T3 EP 1999-303260 19990427; AU 763065 B

AU 1999-44743 19990826; MX 211939 B MX 1999-4096 19990430; RU 2225005 C2

RU 1999-109103 19990427; IL 129594 A IL 1999-129594 19990426; TW 594009 A

TW 1999-110056 19990616

FDT US 6200773 B1 CIP of US 5902731; DE 69902730 E Based on EP 990706; ES

2183482 T3 Based on EP 990706; AU 763065 B Previous Publ. AU 9944743

PRAI US 1999-282083 19990330; US 1998-161876 19980928

IC ICM C12M001-40; C12Q001-32; C12Q001-54; G01N000-00;

G01N033-50; G01N033-72
 ICS C12M001-34; G01N033-52; G01N033-573; G01N033-64;
 G01N033-66; G01N033-68
 AB EP 990706 A UPAB: 20050126
 NOVELTY - A reagent for measuring analyte concentration in a haemoglobin-containing biological fluid, comprises an analyte specific dehydrogenase enzyme, nicotinamide adenine dinucleotide (NAD), an NAD derivative, pyrrolo-quinoline quinone (PQQ) or a PQQ derivative, a tetrazolium dye precursor, a diaphorase enzyme or its analogue, and a nitrite salt.
 DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
 (1) a dry reagent strip for determining the presence and amount of an analyte in a haemoglobin-containing biological fluid comprising a reagent coated test pad on a support layer;
 (2) a dry reagent strip for determining the presence and amount of an analyte in a haemoglobin-containing biological fluid comprising a top layer overlaying a test pad on a support layer, a first part of the reagent is on the support layer, and a second part is on the top and/or support layer; and
 (3) a dry reagent test strip for determining the presence and amount of an analyte in a haemoglobin-containing biological fluid comprises
 (a) a support layer;
 (b) a test pad having a coating comprising an analyte specific dehydrogenase enzyme, NAD, an NAD derivative, PQQ or a PQQ derivative, (a tetrazolium dye precursor, and a diaphorase enzyme or its analogue; and
 (c) a bibulous top layer coated with a nitrite salt.
 USE - The reagent is useful for measuring the concentration of an analyte e.g. glucose or beta -hydroxybutyrate in a haemoglobin-containing biological fluid, e.g. whole blood.
 Dwg.0/7
 FS CPI EPI
 FA AB; DCN
 MC CPI: B04-B04D5; B04-L01; B04-L02; B04-L03D; B10-A07; B10-C04D; B11-C07B;
 B12-K04; D05-A02A; D05-H09
 EPI: S03-E14H
 L33 ANSWER 9 OF 9 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
 AN 1992-090281 [12] WPIX
 CR 1991-067222 [10]; 1996-435778 [44]; 1997-147570 [14]; 1997-235179 [21];
 1998-147239 [14]; 1998-350262 [31]
 DNN N1992-067804 DNC C1992-041589
 TI Reagent strip for assaying whole blood samples especially for glucose - comprising a porous matrix uniformly impregnated with a separation coating and a testing reagent.
 DC A89 B04 D16 J04 R16 S03
 IN KISER, E J; RICE, E G; TOMASCO, M F
 PA (LIFE-N) LIFESCAN INC; (KISE-I) KISER E J; (LIFE-N) LIFESCAN
 CYC 14
 PI EP 475692 A 19920318 (199212)* 17
 R: BE CH DE FR GB IT LI LU NL SE
 AU 9183618 A 19920312 (199220) 39 G01N033-49 <--
 CA 2050677 A 19920307 (199224) G01N033-66
 US 5306623 A 19940426 (199416) C12Q001-54 <--
 JP 06086696 A 19940329 (199417) 13 C12Q001-54 <--
 AU 657486 B 19950316 (199518) G01N033-52 <--
 EP 475692 B1 19950531 (199526) EN 18 G01N033-52 <--
 R: BE CH DE FR GB IT LI LU NL SE
 DE 69110098 E 19950706 (199532) G01N033-52 <--
 JP 3220486 B2 20011022 (200169) 12 C12Q001-54 <--
 CA 2050677 C 20030408 (200329) EN G01N033-66
 ADT EP 475692 A EP 1991-308178 19910906; AU 9183618 A AU 1991-83618 19910904;
 CA 2050677 A CA 1991-2050677 19910904; US 5306623 A CIP of US 1989-399055
 19890828, CIP of US 1990-578364 19900906, US 1991-736537 19910726; JP
 06086696 A JP 1991-250308 19910904; AU 657486 B AU 1991-83618 19910904; EP

475692 B1 EP 1991-308178 19910906; DE 69110098 E DE 1991-610098 19910906,
 EP 1991-308178 19910906; JP 3220486 B2 JP 1991-250308 19910904; CA 2050677
 C CA 1991-2050677 19910904
 FDT AU 657486 B Previous Publ. AU 9183618; DE 69110098 E Based on EP 475692;
 JP 3220486 B2 Previous Publ. JP 06086696
 PRAI US 1991-736537 19910726; US 1990-578364 19900906;
 US 1989-399055 19890828
 REP DE 1498601; EP 256806; EP 415679; US 3552928; EP 336483
 IC ICM C12Q001-54; G01N033-49; G01N033-52;
 G01N033-66
 ICS C12Q001-00; C12Q001-26; C12Q001-28;
 G01N021-00; G01N021-78
 AB EP 475692 A UPAB: 20030505
 Dwg.1,2/6

The separation coating may be a material selected from chitosan, hydroxypropyl cellulose, hydroxyethyl cellulose, polyvinyl cellulose, polyacrylic acid polymer, polyethylene glycol, polyvinyl sulphonic acid, polystyrene sulphonic acid, or methylvinylether and maleic anhydride copolymer or polyethylene glycol-15 tallowamine. The matrix may be a hydrophilic or hydrophobic anisotropic polysulphone or an antistatic polyester membrane.

The test reagent may comprise glucose oxidase (GO), horseradish peroxidase (HRP) and an indicator, e.g. alizarin cyanin green, bromopyrogallol red, anazoline sodium, pyrogallol-sulphophthalein or 2,3-azino-di-(3)ethylbenzthiazoline sulphonate.

Also claimed is a glucose measurement mechanism having a separating system and a testing reagent system embedded in a matrix, the matrix being formed from a porous anisotropic membrane.

USE/ADVANTAGE - The test strip can separate coloured components from whole blood so that changes in colour of the testing reagent can be used to accurately measure an analyte such as glucose.

1,2/6

FS CPI EPI
 FA AB; GI; DCN
 MC CPI: A12-V03C2; B04-B02C3; B04-B04D5; B04-C03; B06-A01; B06-A03; B06-B02;
 B06-F01; B10-A06; B10-A07; B10-A16; B11-C07B1; B12-K04A;
 D05-A02A; D05-H09; J04-B01
 EPI: S03-E14H1

=> d all abeq abex tech l34 tot

L34 ANSWER 1 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
 AN 1994-265967 [33] WPIX
 DNN N1994-209257 DNC C1994-121643
 TI Determn. the number of living microorganisms in a sample solution - by
 filtering the sample soln .through a hydrophobic filtrationmembrane,
 spraying a solution of ATP-extracting solution, etc..
 DC A89 B04 D13 D15 D16 D21 J04 S03 U11
 IN SETO, S
 PA (MIFI) NIHON MILLIPORE KK; (MIFI) NIPPON MILLIPORE KK; (MIFI) NIPPON
 MILLIPORE KOGYO KK; (MIFI) MILLIPORE CORP
 CYC 5
 PI EP 612850 A2 19940831 (199433)* EN 12 C12Q001-06 <--
 R: DE FR GB
 JP 06237793 A 19940830 (199439) 8 C12Q001-06 <--
 EP 612850 A3 19950628 (199611) C12Q001-06 <--
 US 5766868 A 19980616 (199831) C12Q001-66 <--
 EP 612850 B1 19990811 (199936) EN C12Q001-06 <--
 R: DE FR GB
 DE 69419948 E 19990916 (199944) C12Q001-06 <--
 JP 3228812 B2 20011112 (200174) 8 C12Q001-06 <--
 ADT EP 612850 A2 EP 1994-102084 19940210; JP 06237793 A JP 1993-44397
 19930210; EP 612850 A3 EP 1994-102084 19940210; US 5766868 A Cont of US
 1994-193680 19940208, US 1995-443654 19950518; EP 612850 B1 EP 1994-102084
 19940210; DE 69419948 E DE 1994-619948 19940210, EP 1994-102084 19940210;

JP 3228812 B2 JP 1993-44397 19930210
 FDT DE 69419948 E Based on EP 612850; JP 3228812 B2 Previous Publ. JP 06237793
 PRAI JP 1993-44397 19930210
 REP No-SR.Pub; 1.Jnl.Ref; EP 465987; EP 529084; EP 563858; JP 04030798; WO 9214838
 IC ICM C12Q001-06; C12Q001-66
 ICS B01D061-00; C12Q001-24; G01N021-76; G01N021-77
 AB EP 612850 A UPAB: 19941010
 Determin. the number of living microorganisms in a sample solution suspected of containing such microorganisms comprises: (1) filtering the sample solution through a hydrophobic filtration membrane to entrap the microbes with hydrophobic barriers; (2) spraying a solution of an ATP-extracting reagent onto the microbe-containing membrane to extract ATP from the microbes; (3) spraying a solution of a luminescence-inducing reagent onto the membrane to induce luminescence; and (4) measuring the level of luminescence.
 USE - The method is used to determine a viable count or number of viable microbes in industrial water, raw materials, intermediates, and prods. processed in the food and beverage, pharmaceutical, cosmetic and microelectronic industries.
 In an example, a series of 0.5 micro-1 aqueous ATP solns. each containing ATP (10-12g, 5x10-13g, or 5x10-14g) were prepared. Hydrophobic filtration membranes were spotted with one of the above solns., air dried, and subjected to fine spray of luminescence-inducing reagent, using a pressurised sprayer. After luminescence was induced, the filtration membranes were placed into a bioluminescence image analysis system and the luminescence of the bright spots were measured.
 Dwg.1/2
 FS CPI EPI
 FA AB; GI; DCN
 MC CPI: A12-L04B; B04-B03B; B04-C03B; B04-C03D; B04-F01; B04-F10; B04-L03A; B06-D06; B11-C07B4; B11-C08D3; B12-K04; D03-H01G; D04-A01F; D04-A01H; D05-A02A; D05-H09; D08-B; J04-B01
 EPI: S03-E04D; S03-E14B; S03-E14H; S03-F06C; U11-C15B; U11-F01
 L34 ANSWER 2 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
 AN 1993-182693 [22] WPIX
 CR 1990-038331 [06]
 DNN N1993-140411 DNC C1993-080975
 TI Reaction cartridge for semi-automated biological sample analyser - carries two-dimensional array of isolated test sites in solid phase binding layer.
 DC A89 B04 P73 S03
 IN DEFRESE, J D; DURLEY, B A; MERKH, C W
 PA (ABBO) ABBOTT LAB; (CHAD) CHAKAKI DYEING KK
 CYC 19
 PI WO 9310454 A1 19930527 (199322)* EN 85 G01N033-543
 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE
 W: CA JP
 US 5281540 A 19940125 (199405) 32 G01N033-545
 JP 07501149 W 19950202 (199514) G01N033-543
 EP 649534 A1 19950426 (199521) EN G01N033-543
 R: BE CH DE ES FR GB IT LI
 EP 649534 A4 19960522 (199643) G01N033-543
 EP 649534 B1 19990811 (199936) EN G01N033-543
 R: BE CH DE ES FR GB IT LI
 DE 69229801 E 19990916 (199944) G01N033-543
 ES 2135419 T3 19991101 (199953) G01N033-543
 ADT WO 9310454 A1 WO 1992-US9362 19921029; US 5281540 A CIP of US 1988-227272 19880802, US 1991-796942 19911122; JP 07501149 W WO 1992-US9362 19921029, JP 1993-509284 19921029; EP 649534 A1 EP 1992-925045 19921029, WO 1992-US9362 19921029; EP 649534 A4 EP 1992-925045 ; EP 649534 B1 EP 1992-925045 19921029, WO 1992-US9362 19921029; DE 69229801 E DE 1992-629801 19921029, EP 1992-925045 19921029, WO 1992-US9362 19921029; ES 2135419 T3 EP 1992-925045 19921029
 FDT US 5281540 A CIP of US 5075077; JP 07501149 W Based on WO 9310454; EP 649534 A1 Based on WO 9310454; EP 649534 B1 Based on WO 9310454; DE

69229801 E Based on EP 649534, Based on WO 9310454; ES 2135419 T3 Based on EP 649534

PRAI US 1991-796942 19911122; US 1988-227272 19880802

REP US 4301115; US 4776904; US 4797259; 1.Jnl.Ref; EP 353591

IC ICM G01N033-543; G01N033-545

ICS B32B031-20; G01N033-50; G01N033-544; G01N033-58

AB WO 9310454 A UPAB: 19991215

Device supports a number of selected capture reagents each reactive with a specific assay binding component of interest in a biological sample, and includes a first layer of capture reagent binding material and a second layer of non-absorbent substrate material below the first layer. A number of test sites are formed in the first layer each adapted to bind a selected capture reagent. Each test site is isolated from every other site for confining capture reagent applied to one of the sites. The isolation is effected by hydrophobic barriers disposed about the test sites.

A test array (82) pref. contains circular or annular depressions (89) creating isolated test sites (84) composed of binding layer material (83) encircled by a moat (99) of air space.

USE - The device is used with a semi-automated biological analyser for carrying out assays on a series of different biological samples. It is especially for the simultaneous assay of biological fluid samples for human IgE class antibodies specific to a preselected panel of allergens.

con

Dwg. 2/17

Dwg. 2/17

Dwg. 2/17

FS CPI EPI GMPI

FA AB; GI; DCN

MC CPI: A12-W11L; B04-B04C6; B04-C02A3; B04-C03D; B11-C07A7; B12-K04

EPI: S03-E14H4; S03-E15

ABEQ US 5281540 A UPAB: 19940315

Semi-automated biological sample analyser, partic. to identify allergic reactions, includes a reaction cartridge with a reaction well contg. a test array (82) with circular or annular depressions (89) creating a number of isolated test sites (84) of binding material (83), bonded (87) to a non-absorbent substrate (85). Binding layer is of nitrocellulose or nylon and substrate is of polyester film. Test sites are approx. 0.1 inches dia..

USE/ADVANTAGE - Simultaneous panel of tests on a number of patient samples. Number of components can be tested with single addn. of patient sample.

Dwg.8A/17

L34 ANSWER 3 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 1993-171852 [21] WPIX

DNN N1993-132030 DNC C1993-076292

TI Vacuum blood collecting tube - has closed-end tube body comprising polyethylene terephthalate or polyester with inside wall coated with hydrophilic silicone.

DC A96 B04 P31 S03

PA (NISS-N) NISSHO CORP

CYC 1

PI JP 05103772 A 19930427 (199321)* 4 A61B005-14

ADT JP 05103772 A JP 1991-298488 19911016

PRAI JP 1991-298488 19911016

IC ICM A61B005-14

ICS G01N033-48

AB JP 05103772 A UPAB: 19931116

In a vacuum blood collecting tube consisting of sealing member and closed-end tube body, the material of the closed-end tube body includes 99-92 weight% of polyethylene terephthalate or polyester containing as the principal component, polyethylene terephthalate, and 1-8 weight% of polyamide containing xylylene gp.; further, including 1-100 ppm of transition metal. Hydrophilic silicone coating is provided on the inside wall of the tube; and coating of blood coagulating agent is provided on the hydrophilic

silicone coating.

Rubber plug is mounted to the opening of the closed-end tube body, and the inside of the closed-end tube body is held in specified evacuated condition to suck required amount of blood sample. To hold the evacuated condition gas barrier properties are required for the closed-end tube body. It is necessary to add blood coagulating agent to shorten the time for coagulation of blood when separating centrifugally the blood into plasma and blood corpuscles. With this blood collecting tube, the evacuated condition scarcely changes with time. Further, because of the presence of the blood coagulating agent coating on the hydrophobic silicon coating, the blood coagulating properties are increased.

USE/ADVANTAGE - The blood collecting tube is used in biochemical tests, blood serum tests, blood tests, blood sugar measurement, etc., to collect sample blood.

Dwg.0/0

FS CPI EPI GMPI

FA AB; DCN

MC CPI: A05-E01D; A05-E04E; A05-F; A07-A03C; A11-C04B2; A12-V03B; B04-B04D5; B04-C03D; B11-C08; B12-K04A
EPI: S03-E13B; S03-E14H1

L34 ANSWER 4 OF 4 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 1988-106828 [16] WPIX

DNN N1988-081068 DNC C1988-047927

TI Device for detecting Chlamydia and Neisseria antigen - includes matrix layer containing poly tetra fluoroethylene microparticles for efficient antigen retention.

DC A96 B07 F04 J04 S03

IN VARITEK, V A

PA (ABBO) ABBOTT LAB

CYC 13

PI EP 264036 A 19880420 (198816)* EN 11

R: AT BE CH DE ES FR GB IT LI NL

AU 8779482 A 19880421 (198824)

JP 63198969 A 19880817 (198839)

CA 1306415 C 19920818 (199239)

EP 264036 B1 19930630 (199326) EN 14

R: AT BE CH DE ES FR GB IT LI NL

DE 3786388 G 19930805 (199332)

ES 2042526 T3 19931216 (199403)

JP 07104354 B2 19951113 (199550)

JP 08105898 A 19960423 (199626)

JP 2541793 B2 19961009 (199645)

G01N033-52 <--

G01N033-52 <--

G01N033-52 <--

G01N033-52 <--

G01N033-571

G01N033-571

G01N033-571

ADT EP 264036 A EP 1987-114415 19871002; JP 63198969 A JP 1987-262566

19871015; CA 1306415 C CA 1987-549226 19871014; EP 264036 B1 EP

1987-114415 19871002; DE 3786388 G DE 1987-3786388 19871002; EP

1987-114415 19871002; ES 2042526 T3 EP 1987-114415 19871002; JP 07104354

B2 JP 1987-262566 19871015; JP 08105898 A Div ex JP 1987-262566 19871015;

JP 1995-96678 19871015; JP 2541793 B2 Div ex JP 1987-262566 19871015, JP

1995-96678 19871015

FDT DE 3786388 G Based on EP 264036; ES 2042526 T3 Based on EP 264036; JP

07104354 B2 Based on JP 63198969; JP 2541793 B2 Previous Publ. JP 08105898

PRAI US 1986-919396 19861016

REP A3...8932; EP 119622; EP 173375; EP 200381; EP 217403; EP 269876;

No-SR.Pub; US 4042329; US 4338094

IC ICM G01N033-52

ICS C12M001-34; G01N033-545; G01N033-546; G01N033-571

AB EP 264036 A UPAB: 19930923

Solid phase device for determining presence of Chlamydia trachomatis or Neisseria gonorrhoeae antigen comprises a planar layer of a porous, fibrous matrix material which retains and immobilises numerous, spherical particles of PTFE having average dia. 0.1-10 microns. In use, a test sample is applied to one surface of the material and at least a portion of it will pass through to the opposite surface.

The device also includes (1) a filter layer, applied over the sample-receiving surface of the matrix; (2) an absorbent underneath the

opposite surface and (3) a barrier layer, between absorbent and matrix, to prevent fluid retained by (2) returning to the matrix.

ADVANTAGE - The PTFE particles bind antigen more effectively than other microparticles, especially important as sample volume and antigen concentration

are

generally low. The particles are resistant to strong acids and bases, and most organic solvents; are stable at -240 to 260 deg.C, and since they are hydrophobic absorb very little water.

1/5

FS CPI EPI

FA AB; GI; DCN

MC CPI: A04-E08; A12-V03C2; B04-B04C1; B11-C07A4; B11-C07B1; B12-K04A4;
F05-A06E; J04-B01; J04-C04

EPI: S03-E14H4

ABEQ EP 264036 B UPAB: 19931116

A solid-phase assay device (10) useful in a binding assay for determining the presence of an analyte in a sample, the device comprising a substantially planar layer (12) of a material having a porous matrix of fibres and a plurality of substantially spherical, solid particles having an average diameter of from 0.1 to 10 microns the particles being retained and immobilized within said matrix upon the fibres, the substantially planar layer (12) having a first, sample-contacting surface (12a) and a second surface (12b) opposed to the first surface such that, when the device is in use in the performance of the assay, at least a portion of the sample contacting the first surface (12a) passes through the substantially planar layer to the second surface (12b), characterised in that said solid particles consist essentially of polytetrafluoroethylene capable of directly binding Chlamydia trachomatis or Neisseria gonorrhoeae.

Dwg.1/5

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